ABSTRACT

Provided is a system and method for detecting marginal data transmissions from any of a number of security devices in a security system including a control unit in communication with the security devices over a serial data communications loop. First, the control unit receives a data transmission from a security device, wherein the data transmission includes a number of bit intervals in which a logic 1 level is assumed by the control unit unless a logic 0 level is detected by the control unit. The control unit samples the data transmission at a first predetermined time during the bit interval to obtain a first sample value, and then it samples the data transmission at a second predetermined time during the bit interval to obtain a second sample value (the second predetermined time being later than the first predetermined time). If the first sample value is a logic 1 and the second sample value is a logic 0, this indicates that the data transmission from the security device is marginally recoverable. If, however, the first sample value is a logic 0 and the second sample value is a logic 0, this indicates that the data transmission is acceptable. If the second sample value is a logic 1, then the control unit assumes the transmitted data bit to be a logic 1, and it makes no indication regarding the acceptability of the data transmission.